APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/903,780	07/12/2001	John Border	PD-201020	1489

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EXAMINER
ABRISHAMKAR, KAVEH

ART UNIT	PAPER NUMBER
2131	

DATE MAILED: 03/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
Office Action Summary	09/903,780	BORDER ET AL.
	Examiner	Art Unit	
	Kaveh Abrishamkar	2131	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on <u>08 December 2005</u>.

2a) ☐ This action is **FINAL**.   2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) *1-16,18,20 and 22-35* is/are pending in the application.

     4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) *1-16, 18, 20, and 22-35* is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.

     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

     a) ☐ All   b) ☐ Some * c) ☐ None of:

       1. ☐ Certified copies of the priority documents have been received.

       2. ☐ Certified copies of the priority documents have been received in Application No. _____.

       3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

     * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1.   A request for continued examination under 37 CFR 1.114, including the fee set

forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this

application is eligible for continued examination under 37 CFR 1.114, and the fee set

forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action

has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on

December 8, 2005 has been entered.

2.   Claims 1-16, 18, 20, and 22-35 are currently pending.

Response to Arguments

3.   Applicant's arguments filed December 8, 2005 have been fully considered but

they are not persuasive for the following reasons:

Regarding claim 1,8,22, and 29, the applicant argues that the CPA, Gelman et al.

(U.S. Patent No. 6,415,329) and Albert et al. (U.S. Patent No. 6,742,045), does not

teach "tearing down, during a predetermined period, the unspoofed connection based

on the identifying step" and "wherein the predetermined period is set to minimize delay

for restarting of the spoofed connection." This argument is not found persuasive.

Gelman teaches that the gateway application listens for TCP connections (unspoofed

messages), and once they are identified (identifying step) as such, tearing down the

connection, and spoofing the connection between the PEP gateways (column 9 line 66

– column 10 line 8). Furthermore, applicant argues that there is no teaching "wherein

the predetermined period is set to minimize delay for restarting the spoofed connection."

Albert teaches a system wherein service managers have backup service managers for

the purpose of providing a fail-over scheme if a master service manager should fail

(column 10 lines 41-51). The "operational status of service managers may be

communicated on the service manager interface" (Albert: column 10 lines 45-46). The

frequency of the updates is a predetermined time set to minimize the down time of a

service manager (PEP). Therefore, it is asserted that the predetermined time is the

time between a service manager failing and an update being received, and it would

have been obvious at the time of invention that this time is set so that there is a

minimum down-time of service.

In light of the above arguments, the rejection is respectfully maintained and

applied below to the amended claims.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

4.   Claims 1-16,18,20, and 22-35 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Gelman et al. (U.S. Patent No. 6,415,329) in view of Albert et al.

(U.S. Patent No. 6,742,045).

Regarding claim 1, Gelman discloses:

A method for performing redundancy switching from a first platform to a second

platform, the method comprising:

identifying a message received over an unspoofed connection according to a

prescribed protocol as an unspoofed message (column 4 lines 10 –45, column 9 line 66

– column 10 line 8);

tearing down, during a predetermined period, the unspoofed connection based

upon the identifying step (Figure 10, column 10 lines 1 – 8, column 15 line 47 – column

17 line 20).

Gelman does not explicitly disclose restarting a spoofed connection between the

second platform and a host wherein the second platform serves as a redundant platform

for the first platform, and the predetermined period is set to minimize delay for restarting

of the spoofed connection. Albert teaches a system in which service managers have

backup service managers for the purpose of providing a fail over scheme if a master

service manager should fail (column 10 lines 41-51). The service managers may be

implemented on a router, and provide a service for packets before forwarding the

packets into the network (column 10 lines 24-30). Gelman also discloses apparatuses

similar to service managers as the Performance Enhancing Proxies (PEPs) provide a

service of changing the TCP packets in order to spoof a connection over a satellite link.

Gelman does not explicitly disclose a scheme in the instance that the PEP should fail.

Albert provides a failover scheme involving backup service managers that would

continue to provide a specified service to the packets in the event that the main service

manager should fail. This would provide relatively uninterrupted service to the

endpoints, besides the startup time for the backup PEP to sync up, which would provide

packets that could tolerate long delay links (e.g. satellite links). Therefore, it would have

been obvious to one of ordinary skill in the art at the time the invention was made to

have a redundant platform setup as in Albert to provide a backup PEP in the system of

Gelman so that a backup can function as the primary did in the event that the primary

should fail as to provide PEP service even if the primary PEP fails. Furthermore, the

"operational status of service managers may be communicated on the service manager

interface" (Albert: column 10 lines 45-46). The frequency of the updates is a

predetermined time set to minimize the down time of a service manager (PEP).

Therefore, it is asserted that the predetermined time is the time between a service

manager failing and an update being received, and it would have been obvious at the

time of invention that this time is set so that there is a minimum down-time of service.

Regarding claim 8, Gelman discloses:

A communication system comprising:

a first platform configured to communicate with a remote platform (Figure 2,

column 15 line 47 – column 17 line 20); and

a second platform configured to communicate with the remote platform, the

second platform being configured to identify a message received from a local host over

an unspoofed connection according to a prescribed protocol as an unspoofed message,

wherein the second platform tears down, during a predetermined period, the unspoofed

connection in response to the identified message to avoid delaying startup of a spoofed

connection with the remote platform (Figure 2, Figure 10, column 4 lines 10 – 45,

column 9 line 66 – column 10 line 8, column 15 line 47 – column 17 line 20).

        Gelman does not explicitly disclose restarting a connection between the second

platform and a host wherein the second platform serves as a redundant platform for the

first platform. Albert teaches a system in which service managers have backup service

managers for the purpose of providing a fail over scheme if a master service manager

should fail (column 10 lines 41-51). The service managers may be implemented on a

router, and provide a service for packets before forwarding the packets into the network

(column 10 lines 24-30). Gelman also discloses apparatuses similar to service

managers as the Performance Enhancing Proxies (PEPs) provide a service of changing

the TCP packets in order to spoof a connection over a satellite link. Gelman does not

explicitly disclose a scheme in the instance that the PEP should fail. Albert provides a

failover scheme involving backup service managers that would continue to provide a

specified service to the packets in the event that the main service manager should fail.

This would provide relatively uninterrupted service to the endpoints, besides the startup

time for the backup PEP to sync up, which would provide packets that could tolerate

long delay links (e.g. satellite links). Therefore, it would have been obvious to one of

ordinary skill in the art at the time the invention was made to have a redundant platform

setup as in Albert to provide a backup PEP in the system of Gelman so that a backup

can function as the primary did in the event that the primary should fail as to provide

PEP service even if the primary PEP fails.

Regarding claim 15, Gelman discloses:

A communication gateway for providing redundant communication in a

communication system having a remote platform, the gateway comprising:

a communication interface configured to communicate with a primary gateway

configured to support a spoofed connection over a backbone connection to the remote

platform (Figure 10, column 10 lines 1 – 8, column 15 line 47 – column 17 line 20); and

a processor coupled to the communication interface and configured to restart a

spoofed connection (Figure 2, Figure 10, column 4 lines 10 – 45, column 9 line 66 –

column 10 line 8, column 15 line 47 – column 17 line 20).

Gelman does not explicitly disclose wherein the unspoofed messages are

forwarded after a predetermined period to avoid delaying the restart of the spoofed

connection. Albert teaches a system in which service managers have backup service

managers for the purpose of providing a fail over scheme if a master service manager

should fail (column 10 lines 41-51). The service managers may be implemented on a

router, and provide a service for packets before forwarding the packets into the network

(column 10 lines 24-30). Gelman also discloses apparatuses similar to service

managers as the Performance Enhancing Proxies (PEPs) provide a service of changing

the TCP packets in order to spoof a connection over a satellite link. Gelman does not

explicitly disclose a scheme in the instance that the PEP should fail. Albert provides a

failover scheme involving backup service managers that would continue to provide a

specified service to the packets in the event that the main service manager should fail.

This would provide relatively uninterrupted service to the endpoints, besides the startup

time for the backup PEP to sync up, which would provide packets that could tolerate

long delay links (e.g. satellite links). Therefore, it would have been obvious to one of

ordinary skill in the art at the time the invention was made to have a redundant platform

setup as in Albert to provide a backup PEP in the system of Gelman so that a backup

can function as the primary did in the event that the primary should fail as to provide

PEP service even if the primary PEP fails. Furthermore, the "operational status of

service managers may be communicated on the service manager interface" (Albert:

column 10 lines 45-46). The frequency of the updates is a predetermined time set to

minimize the down time of a service manager (PEP). Therefore, it is asserted that the

predetermined time is the time between a service manager failing and an update being

received, and it would have been obvious at the time of invention that this time is set so

that there is a minimum down-time of service.

Regarding claim 22, Gelman discloses:

A communication gateway for providing redundant communication in a

communication system having a remote platform, the gateway comprising:

means for identifying a message received over a connection according to a

prescribed protocol as an unspoofed message (column 4 lines 10 –45, column 9 line 66

– column 10 line 8);

means for terminating, during a predetermined period, the connection based

upon the identified message (Figure 10, column 10 lines 1 – 8, column 15 line 47 –

column 17 line 20); and

means for restarting a spoofed connection (Figure 10, column 10 lines 1 – 8,

column 15 line 47 – column 17 line 20).

Gelman does not explicitly disclose restarting a connection between the second

platform and a host upon detection of a redundancy switch, wherein the second

platform serves as a redundant platform for the first platform wherein the predetermined

period is set to minimize delay for restarting of the spoofed connection. Albert teaches

a system in which service managers have backup service managers for the purpose of

providing a fail over scheme if a master service manager should fail (column 10 lines

41-51). The service managers may be implemented on a router, and provide a service

for packets before forwarding the packets into the network (column 10 lines 24-30).

Gelman also discloses apparatuses similar to service managers as the Performance

Enhancing Proxies (PEPs) provide a service of changing the TCP packets in order to

spoof a connection over a satellite link. Gelman does not explicitly disclose a scheme in

the instance that the PEP should fail. Albert provides a failover scheme involving

backup service managers that would continue to provide a specified service to the

packets in the event that the main service manager should fail. This would provide

relatively uninterrupted service to the endpoints, besides the startup time for the backup

PEP to sync up, which would provide packets that could tolerate long delay links (e.g.

satellite links). Therefore, it would have been obvious to one of ordinary skill in the art

at the time the invention was made to have a redundant platform setup as in Albert to

provide a backup PEP in the system of Gelman so that a backup can function as the

primary did in the event that the primary should fail as to provide PEP service even if

the primary PEP fails. Furthermore, the "operational status of service managers may be

communicated on the service manager interface" (Albert: column 10 lines 45-46). The

frequency of the updates is a predetermined time set to minimize the down time of a

service manager (PEP). Therefore, it is asserted that the predetermined time is the

time between a service manager failing and an update being received, and it would

have been obvious at the time of invention that this time is set so that there is a

minimum down-time of service.

Regarding claim 29, Gelman discloses:

A computer-readable medium carrying one or more sequences of one or more

instructions for performing redundancy switching from a first platform to a second

platform, the one or more sequences of one or more instructions including instructions

which, when executed by one or more processors, cause the one or more processors to

perform the steps of:

identifying a message received over an unspoofed connection according to a

prescribed protocol as an unspoofed message (column 4 lines 10 –45, column 9 line 66

– column 10 line 8); and

tearing down, during a predetermined period, the unspoofed connection based

upon the identifying step (Figure 10, column 10 lines 1 – 8, column 15 line 47 – column

17 line 20).

Gelman does not explicitly disclose restarting a spoofed connection between the

second platform and a host wherein the second platform serves as a redundant platform

for the first platform and the predetermined period is set to minimize delay for restarting

of the spoofed connection. Albert teaches a system in which service managers have

backup service managers for the purpose of providing a fail over scheme if a master

service manager should fail (column 10 lines 41-51). The service managers may be

implemented on a router, and provide a service for packets before forwarding the

packets into the network (column 10 lines 24-30). Gelman also discloses apparatuses

similar to service managers as the Performance Enhancing Proxies (PEPs) provide a

service of changing the TCP packets in order to spoof a connection over a satellite link.

Gelman does not explicitly disclose a scheme in the instance that the PEP should fail.

Albert provides a failover scheme involving backup service managers that would

continue to provide a specified service to the packets in the event that the main service

manager should fail. This would provide relatively uninterrupted service to the

endpoints, besides the startup time for the backup PEP to sync up, which would provide

packets that could tolerate long delay links (e.g. satellite links). Therefore, it would have

been obvious to one of ordinary skill in the art at the time the invention was made to

have a redundant platform setup as in Albert to provide a backup PEP in the system of

Gelman so that a backup can function as the primary did in the event that the primary

should fail as to provide PEP service even if the primary PEP fails. Furthermore, the

"operational status of service managers may be communicated on the service manager

interface" (Albert: column 10 lines 45-46). The frequency of the updates is a

predetermined time set to minimize the down time of a service manager (PEP).

Therefore, it is asserted that the predetermined time is the time between a service

manager failing and an update being received, and it would have been obvious at the

time of invention that this time is set so that there is a minimum down-time of service.

Claim 2 is rejected as applied above in rejecting claim 1. Furthermore, Gelman

discloses:

> The method according to claim 1, further comprising:

> invoking a reset function, wherein the reset function transmits a reset message to

a local host that forwarded the message to tear down the unspoofed connection

(column 10 lines 1 – 9, column 22 lines 25 – 40, column 23 lines 25 – 34).

Claim 3 is rejected as applied above in rejecting claim 1. Furthermore, Gelman

discloses:

> The method according to claim 1, further comprising: determining whether the

predetermined period has expired (column 5 lines 10 – 22, column 10 lines 1 – 38); and

forwarding unspoofed messages to a remote platform based upon the

determining step (column 10 lines 1 – 38).

Claim 4 is rejected as applied above in rejecting claim 1. Furthermore, Gelman

discloses:

The method according to claim 1, wherein the prescribed protocol is the

Transmission Control Protocol, the method further comprising:

determining whether global TCP spoofing is enabled (column 9 line 16 – column

10 line 37); and

selectively forward TCP segments unspoofed to a remote platform (column 9 line

16 – column 10 line 37).

Claim 5 is rejected as applied above in rejecting claim 1. Furthermore, Gelman

discloses:

The method according to claim 1, further comprising:

establishing a backbone connection from the second platform to a remote

platform (Figure 10, column 15 line 47 – column 17 line 20); and

forwarding a spoofed message over the backbone connection to a remote host

(Figure 10, column 15 line 47 – column 17 line 20).

Claim 7 is rejected as applied above in rejecting claim 1. Furthermore, Gelman

discloses:

The method according to claim 1, further comprising: forwarding messages associated with another protocol to a remote platform irrespective of the predetermined period (column 9 line 65 – column 10 line 38).

Claim 6 is rejected as applied above in rejecting claim 1. Furthermore, Gelman discloses:

The method according to claim 5, wherein the backbone connection in the establishing step includes a space link over a satellite network (Figures 1,2,14, column 1 line 21 – column 2 line 32).

5.   Claims 9-14 are system claims analogous to the method claims rejected above, and therefore, are rejected following the same reasoning.

6.   Claims 16 and 18, and 20are apparatus claims analogous to the method claims rejected above, and therefore, are rejected following the same reasoning.

7.   Claims 23 – 28 are apparatus claims analogous to the method claims rejected above, and therefore, are rejected following the same reasoning.

8.   Claims 30 – 35 are computer-readable medium claims analogous to the method claims rejected above, and therefore, are rejected following the same reasoning.

Conclusion

Any inquiry concerning this communication or earlier communications from the
examiner should be directed to Kaveh Abrishamkar whose telephone number is 571-
272-3786. The examiner can normally be reached on Monday thru Friday 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's
supervisor, Ayaz Sheikh can be reached on 571-272-3795. The fax phone number for
the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the
Patent Application Information Retrieval (PAIR) system. Status information for
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you have questions on access to the Private PAIR system, contact the Electronic
Business Center (EBC) at 866-217-9197 (toll-free).

KA
03/04/2006

CHRISTOPHER REVAK
PRIMARY EXAMINER

3/5/06